SENIOR ENGINEERING TECHNICIAN

DEFINITION

To provide complex technical and paraprofessional engineering support work in the field or office; coordinate specific projects and studies as assigned; provide support to engineering project managers in the planning, design and construction management of assigned projects including providing information to contractors, developers and the general public; and perform related duties as assigned.

DISTINGUISHING CHARATERISTICS

This is the advanced journey level class in the Engineering Technician series. Positions at this level are distinguished from the other classes within the series by the level of responsibility assumed and the complexity of duties assigned. Employees perform the most difficult and responsible types of duties assigned to classes within this series including lead responsibility for traffic control plan review, implementation of development impact fee program and to provide technical and functional guidance over assigned staff. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned supervisor.

ESSENTIAL FUNCTIONS – Functions may include, but are not limited to, the following:

Provide complex technical and paraprofessional engineering support work in the field or office; coordinate specific projects and studies; provide support to engineering project managers in the planning, design and construction management of assigned projects including providing information to contractors, developers and the general public; and perform related duties as assigned

Assist with the formation, revisions, waivers, annual updates, reports and record keeping for Development Impact Fees, Open Space Districts and Assessment Districts using automated systems.

Administer developer agreements relating to Development Impact Fees; implement and monitor the City's Development Impact Fee Ordinances; reconcile and monitor developer impact fee prepayment schedule; assist in modifying and maintain developer payment agreement terms

Setup, adjust, maintain, and monitor individual Permit-Plus-linked trust accounts for tracking developer impact fee credits; work with City's special tax consultants for Community Facilities District funded credits.

Collect fees for Reimbursement Districts and Engineering fee; maintain trust accounts.

Assist in review of assessment district contracts and audits invoices submitted for payment; processes staff-time reimbursements for open space and assessment district projects and bond releases.

Prepare preliminary and final engineering plans and specification for the construction and/or improvement of storm drains, street, sanitary sewers, and related structures; reviews property development and site plans; prepare preliminary and final engineering plans, specifications and cost estimates for CIP projects; assist in investigation of engineering problems; write reports and makes recommendations.

Inspects building plot plans for compliance with the City Code; makes plan layouts, details, and drawings.

Process or oversee the processing of engineering permits; inspects and/or oversee the inspection of the construction of public works facilities; makes mathematical calculations such as hydraulic run-off, areas, closures, grades, and curves.

Ensure contractor compliance with various government requirements; provides information to contractors, developers, and the general public as required; answer any questions from contractors during the bidding phase; prepare documentation to council; review submittal from contractor; prepare engineering reports; communicate with construction inspection field personnel on progress; resolve any issues.

Oversee or perform materials testing; prepare routine drainage, sewage, street alignment, and location studies; prepare, check, and oversee the preparation of legal descriptions and grant deeds for easements and street rights-of-way; prepares preliminary and final cost estimates; writes agenda statements and reports; investigates citizen complaints.

Prepare engineering drawings; perform engineering calculations; determine the best scenario to construct capital improvement project.

Review and approve traffic control plans submitted by contractors and utility companies; design and check the design of plans for traffic control submitted as part of the development and capital improvement projects; follow up on field investigation, inspection and correction of traffic control; review plans for completeness and to insure that signing and striping is appropriate for area or intersection.

Respond to citizen complaints requests regarding vehicular and pedestrian traffic safety including traffic related issues on and around existing, new and future school campuses; develop solutions; conduct field review.

Participate in a lead role in implementing changes and/or corrections for safe traffic conditions around the city.

Receive and review citizen requests for additional street lighting; request permission from Utility; process requests.

Review plans checks of new development improvement plan to assure adequate and appropriate streetlight is providing according to City standards and Caltrans guidelines and procedures.

Investigate citizen complaints as related to assigned duties; provide information to the public; attend meetings on behalf of the City.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Performs related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

City Engineering policies and procedures related to the construction, design and maintenance of municipal systems and facilities.

Standards, standard drafting symbols, methods, practices, techniques and instruments used in engineering and mapping.

Basic principles and practices of civil engineering.

Applicable federal , state and local laws, codes and regulations.

Operational characteristics of standard engineering equipment.

English usage, spelling, grammar, and punctuation.

Computer equipment and software applications related to assignment

Ability to:

Analyze and interpret plans, specifications, survey notes, and various statistical data and graphs;

Use computer aided drafting and design systems, databases, GIS systems and other programs related to engineering design.

Understand, interpret and prepare legal descriptions, engineering reports and maps.

Review plans and documents for conformance with regulations.

Operate computer equipment and software applications related to assignment.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Work with various cultural and ethnic groups in a tactful and effective manner.

Experience and Training

Any combination of education and/or experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Three years of responsible experience in field survey, drafting or related civil engineering work.

Training:

An Associate's Degree in engineering, mathematics, drafting, surveying, computer science/CADD or related field.

License or Certificate

Possession of a valid California driver's license.

PHYSICAL DEMANDS

On a continuous basis walk, stand, bend, crouch or stoop, sit for varying periods of time; must possess sufficient strength, stamina, agility and dexterity to manipulate, operate, lift and carry objects, tools, and materials or equipment for field inspections, materials testing, surveying and office work. Must possess ability to: read and write reports, correspondence, and instructions; verbally communicate in person, over a radio, a telephone conversations; see in the normal vision range with or without correction; hear in the normal range with or without correction

WORKING ENVIRONMENT

Work is performed both outdoors and indoors; the performance of fieldwork tasks requires exposure to a variety of traffic and weather conditions with possible exposure to hazardous materials; indoors work is performed in a carpeted and air-conditioned office environment with fluorescent lighting and moderate noise level. May operate equipment, tools, vehicles under

daylight and evening conditions. Work is frequently disrupted by the need to respond to in-person and telephone inquiries.

4/05